



July 1999 Time Local/ Path Length Path Number of Estimated Width Persons Damage OHIO, North OHZ003-005>014-Lucas - Henry - Wood - Ottawa - Sandusky - Erie - Lorain - Cuyahoga - Lake - Geauga - Ashtabula - Hancock - Seneca -017>023-027>033-Huron - Medina - Summit - Portage - Trumbull - Wyandot - Crawford - Richland - Ashland - Wayne - Stark - Mahoning -036>038-047 Marion - Morrow - Holmes - Knox 0000EST **Excessive Heat** 2359EST Temperatures across northern Ohio were much above normal. High temperatures reached the middle 90s several days and five daily record high temperatures were established at Mansfield and Youngstown. An unofficial 100 degree temperature was measured in Sandusky County at Clyde on July 5th and the temperatures reached 100 degrees in Lake County near Painesville on the 31st. All major reporting stations in northern Ohio finished with average monthly temperatures among the ten warmest on record for July. Youngstown recorded its 6th warmest July on record with the 6th warmest July in Cleveland OHZ002>003-005>014-Fulton - Lucas - Henry - Wood - Ottawa - Sandusky - Erie - Lorain - Cuyahoga - Lake - Geauga - Ashtabula - Hancock -017>023-027>033-Seneca - Huron - Medina - Summit - Portage - Trumbull - Wyandot - Crawford - Richland - Ashland - Wayne - Stark -036>038-047 Mahoning - Marion - Morrow - Holmes - Knox 0000EST 2359EST Drought conditions across northern Ohio eased as thunderstorm rains became more widespread. None the less, very dry soil conditions persisted in a few areas that missed the brunt of the thunderstorm activity. Some communities instituted water use restrictions and crop yields will likely be reduced because of the lack of adequate rainfall. Losses due to the drougt were unknown. **Wyandot County** Carey 01 1330EST 10K Thunderstorm Wind Many trees and powers lines downed. **Ashland County** Polk 01 1540EST 0 5K Thunderstorm Wind Two trees fell and knocked down power lines. **Medina County** Granger Thunderstorm Wind Several trees fell on power lines knocking power out to over 5,000 people. **Medina County** 01 1600EST Lafayette **Funnel Cloud Wayne County** 150K Rittman to 01 1640EST 1655EST Tornado (F1) Dovlestown The tornado touched down on the southeast corner of the town of Rittman then traveled east toward Hatfield Road and Ohio 94 where it flattened an apple orchard. Several buildings were also damaged in the vicinity of the orchard including a small concrete block building which was completely destroyed. The roofs of several other buildings were severely damaged. From the site of the orchard, the tornado traveled east and knocked down many trees before finally dissipating near Doylestown. Eye witness reports and damage surveys indicate that the tornado was slightly aloft during a good part of its life cycle **Knox County** Mt Vernon 01 2136EST 0 0 150K Lightning Lightning struck a feed store at 502 West Gambier Street. The resulting fire did extensive damage to the store **Ashtabula County** Lakeshore 03 1330EST 0 1 Lightning A male of unknown age was stuck by lightning at Great Lakes Marina. The person received minor injuries and was taken to a local

hospital for treatment.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numbe Perse Killed		Estimated Damage Property Crops	July 1999 Character of Storm
OHIO, North								
Ashtabula County Ashtabula	03	1522EST			0	0		Hail (1.00)
Ashtabula County Countywide		1600EST 1645EST trees reported d	own across tl	ne county.	0	0	20K	Thunderstorm Wind
Ashtabula County Lakeshore	A 26 yea							Lightning nicking at Lakeshore Park in Ashtabula ey were treated and released.
Ottawa County Graytown		1315EST arn was blown c	lown and des	troyed just n	0 orth of Gray	0 ytown on 0	30K Graytown Road.	Thunderstorm Wind
Erie County Vermillion	A 59 mpl	1350EST n gust was meas reported near N		illion. Five l	0 poats were o	0 overturned	15K at a local Lake Eric	Thunderstorm Wind (G51) e marina. Downed trees and traffic lights
Lorain County Countywide		1400EST 1440EST ge trees downed			0	0	25K	Thunderstorm Wind
Cuyahoga County North Olmsted		1420EST es and large lim	bs downed. A	A 20 foot by	0 40 foot pav	0 ilion at a h	40K nousing developmen	Thunderstorm Wind nt was also destroyed.
Hancock County Findlay		1430EST s trees and power	er lines down	ed.	0	0	15K	Thunderstorm Wind
Medina County Medina			ruction worke	er was struck	0 by lightnin	1 ng while w	orking outside. Th	Lightning e man was treated for minor injuries at a
Seneca County Tiffin		1430EST rold male was s	truck by light	tning while g	0 colfing. The	1 e man was	treated at a local he	Lightning ospital for minor injuries.
Seneca County Tiffin		1430EST ge tree limbs and	d power lines	downed.	0	0	10K	Thunderstorm Wind
Stark County Countywide		1430EST 1500EST es and power lin	es reported d	own in Cant	0 on. In Masi	0 ilion, 14 tr	25K ees were blown ove	Thunderstorm Wind er and a house had some siding torn off.
Cuyahoga County Garfield Hgts		1432EST n wind gust was	measured in	Garfield Hei	0 ghts.	0		Thunderstorm Wind (G50)
Cuyahoga County Parma	06	1435EST			0	0		Hail (1.00)





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numbe Perse Killed		Estimated Damage Property Crop	July 1999 Character of Storm
OHIO, North								
Medina County Wadsworth	06 Severa	1450EST l large trees downe	ed.		0	0	5K	Thunderstorm Wind
Lorain County Elyria		1500EST rear old woman wo oman was taken to						Lightning ke traveled through the fan she was using.
Lorain County Lorain	06 A 61 m	1500EST aph wind gust was	measured in	Lorain and 1	0 many trees v	0 vere knocl	15K ked down in Amh	Thunderstorm Wind (G53) terst and Lorain.
Sandusky County Fremont	06 Severa	1500EST 1510EST I power poles blow	n down acro	oss Highway	0 6. A tree w	0 as blown	35K down on the roof	Thunderstorm Wind of a house.
Wyandot County Upper Sandusky	06 Two ca	1500EST ars were damaged b	oy falling tre	es.	0	0	15K	Thunderstorm Wind
Cuyahoga County Warrensville Hgts		1502EST ear old male constr ng while working o			1 laying dead	0 I face up i	n a puddle of wat	Lightning er. Witnesses claim the man was struck by
Geauga County Middlefield	06	1505EST			0	0		Hail (0.75)
Summit County Myersville	06 Many t	1505EST	es downed.		0	0	10K	Thunderstorm Wind
Portage County Countywide	06 Many t	1510EST 1530EST rees downed in the	e Aurora and	Streetsboro.	0 A car was	0 damaged	20K by a falling limb	Thunderstorm Wind in Aurora.
Trumbull County Countywide	06 Dozens	1510EST 1525EST s of trees downed a	across the no	rthern half o	0 f the county.	0	20K	Thunderstorm Wind
Ashtabula County Orwell	06 Severa	1520EST l large limbs down	ed.		0	0	5K	Thunderstorm Wind
Huron County Norwalk		1520EST 1530EST nph wind gust was trees. Several tree						Thunderstorm Wind (G51) roof of a house and a car were damaged by
Ashland County Polk	06 Trees ε	1525EST and power lines dov	wned along S	State Route 5	0 520.	0	10K	Thunderstorm Wind





July 1999 Time Local Path Length Path Width Number of Estimated Damage Persons OHIO, North **Richland County** 0 20K Countywide 06 Thunderstorm Wind Trees and power lines reported down across most of the county. **Huron County** Countywide 06 1530EST 0 Flood Heavy thunderstorm rains in excess of 3 inches in 90 minutes caused many small streams in the county to come out of their banks. Significant street flooding was also reported along State Route 61 in Norwalk. Other roads flooded in Norwalk included Milan Avenue, Water Street and Lais Rd. **Wayne County** Countywide 06 20K Thunderstorm Wind Thunderstorms damaged a railroad crossing gate on Highway 57 near Orrville. Many trees were downed on the northwest side of Wooster. **Ashtabula County** Jefferson 1605EST 06 Lightning Two men, ages 55 and 31 were struck by lightning while leaning on a metal pole in their yard. Both men were treated for minor injuries at a local hospital. **Seneca County** Countywide 09 1600EST 0 100K Thunderstorm Wind Thunderstorms producing strong downburst winds downed trees and power lines throughout the county. A 75 foot by 100 foot pole barn located two miles to the northeast of Republic was completely destroyed and blown 200 feet. Just east of Cromers on State Route 53, a pole barn had an entire side blown off. A nearby garage was blown off its foundation and completely destroyed. Two cars were destroyed in Fostoria by fallen trees Seneca County Fostoria 09 1600EST Hail (0.88) **Wood County North Baltimore** 1605EST 5K Thunderstorm Wind Several large trees were downed. Sandusky County **Fremont** 1608EST 0 10K **Thunderstorm Wind** One tree was blown down in Fremont with several large trees and powerlines downed just south of town. **Hancock County** 1620EST 1630EST 0 15K Countywide 09 **Thunderstorm Wind** A large trees was blown down in the northern portion of the county with several power poles snapped across the southern half of the county. **Erie County** Countywide 09 20K Thunderstorm Wind Four power poles were knocked down in the southwest corner of the county with many trees downed countywide. **Marion County** Countywide 09 60K Thunderstorm Wind

Trees and power lines were downed across the county. A large tree fell in Marion and completely destroyed a 24 foot above ground swimming pool. A car was damaged by a falling tree in New Bloomington.





July 1999 Time Local Path Length Path Width Number of Estimated Persons Damage OHIO, North **Huron County** 0 300K Countywide 09 0 Thunderstorm Wind Thunderstorms producing strong downburst winds downed trees and power lines across the entire county. An addition to a house was completely destroyed along State Route 162 in North Fairfield and an adjacent concrete block barn was destroyed. The roof of a small mobile home was torn off and landed on a truck and destroyed it. Two barns were blown down southeast of Greenwich on Fairfield Angling Road. The roof of trucking company located on State Route 61 north of Plymouth was blown off. One semi trailer inside the building was crushed by the collapsing roof and another semi trailer parked outside was flipped on its side. A plumbing business lost the south wall of its building and had damage done to its floor. A pole building at a Fitchville gas company was destroyed. **Wyandot County** Countywide 0 40K Thunderstorm Wind Twelve trees downed in Upper Sandusky with additional trees and powerlines downed countywide. A semi truck was blown over at weigh station near the intersection of U.S. Highways 23 and 30. **Crawford County** 09 1649EST 90K **Bucyrus** 0 Thunderstorm Wind (G51) A 59 mph wind gust was measured in Bucyrus. Several large trees were downed in Bucyrus and a tree fell on a house in Leesville. The house sustained major damage to a portion of its roof. Thirty to forty trees were blown down at a golf course in Galion. A sun porch on a house in Crestline was hit by a falling tress and destroyed. Flagpoles in the city of Crestline were bent by winds estimated at 60 to 70 mph and a fence at Crestline High School was blown down. **Lorain County** 1650EST Avon 09 O 15K Thunderstorm Wind (G61) Trees and power lines downed across the county. A 70 mph gust was measured in Avon. **Cuyahoga County** 30K Countywide 09 Thunderstorm Wind Trees and power lines were downed across the county including in the cities of Cleveland and Euclid. **Geauga County** 09 1655EST Chardon Hail (1.75) **Geauga County** Chardon 09 1655EST 0 50K Thunderstorm Wind 1710EST Many trees downed across the central portion of the county. Twenty four trees were reported down in Chardon with three homes sustaining minor damage from falling trees. One car was also damaged by a falling tree in Chardon. **Lake County** Countywide 20K 09 0 **Thunderstorm Wind** Trees and power lines downed across the county. A house was damaged by a falling tree in Concord Township to the south of **Huron County** 1700EST 0 30 100K New London 09 0 Tornado (F1)

A tornado briefly touched down near New London. Around 200 trees were blown down. The roof of a barn on State Route 60 was blown off and two other barns just east of town were completely destroyed. Two businesses in New London also suffered roof





July 1999 Time Local/ Path Length Path Number of Estimated Persons Width Damage OHIO, North damage. **Mahoning County** 09 1700EST 150K North Jackson 40 0 0 Tornado (F1) A tornado skipped along a path approximately four to five miles long in Jackson Township. Several homes received structural damage including one that was moved slightly off its foundation. Another home had its garage door and contents destroyed and a few other homes had siding torn off. Power lines and several dozen trees were also knocked down along the path of the tornado. **Lorain County** Rochester 09 20 30K Tornado (F0) A tornado touched down briefly near the intersection of Gore Orphange and Stewart Roads (just south of Rochester) then moved east along Steward Road. Trees and powers lines were blown down. **Ashland County** Countywide 70K 09 Thunderstorm Wind 1730EST Trees downed across the entire county with the most concentrated damage in the northwest corner near Ruggles and Nova. A male of unknown age was injured by flying debris while camping at a campground in Nova. Fallen trees resulted in a major railroad track being closed for three hours. Power poles were snapped at Hayesville and Widowville. At Jeromesville, many trees were downed including two that fell on houses. A fence at a Jeromesville ball field was ripped out of the ground. **Ashtabula County** Countywide 09 1710EST 0 50K Thunderstorm Wind Trees and power lines down across the county. A chimney was toppled off a house in Jefferson while a house in Ashtabula was seriously damaged by two falling trees **Richland County** Countywide 09 1710EST 0 160K Thunderstorm Wind Trees and power lines downed countywide with the most concentrated damage along U.S. Highway 30 on the north side of Mansfield. The roof of a furniture store near Highway 30 in Mansfield was torn off resulting in water damage to much of the store's inventory. Five power poles were snapped just east of the furniture store and trees around the perimeter of a nearby state prison were knocked down. A portion of the roof of a Mansfield car dealership was torn off. Around a dozen trees were knocked down in the city Bellville on the south end of the county. **Medina County** Chippewa On The Lake t 09 Wadsworth 1.1M Thunderstorm Wind A series of macrobursts began on the west side of Chippewa Lake and moved east to Wadsworth resulting in a nearly continuous line of damage. Two homes were destroyed, 16 others suffered major damage and 40 homes suffered minor damage. Of the two homes that were destroyed, one was cut in half by a falling tree and the other was blown off its foundation. Another 200 homes received minimal damage from such things as broken windows and damaged rain gutters. Baseball and softball dugouts at a local

A series of macrobursts began on the west side of Chippewa Lake and moved east to Wadsworth resulting in a nearly continuous line of damage. Two homes were destroyed, 16 others suffered major damage and 40 homes suffered minor damage. Of the two homes that were destroyed, one was cut in half by a falling tree and the other was blown off its foundation. Another 200 homes received minimal damage from such things as broken windows and damaged rain gutters. Baseball and softball dugouts at a local ball field were also destroyed. Hundreds of trees were reported down in the southeastern portion of the county. Approximately 10 vehicles were damaged or destroyed by falling trees and at least 30 houses were struck by falling trees. A semi truck was blown over on Interstate 76 approximately 5 miles west of Wadsworth. Siding on a house in Lafayette Township was torn off. Dozens of trees were downed in Wadsworth with 20 down at one house alone. A boat was damaged by a fallen tree and a large restaurant sign was also blown down. Several homes in the Wadsworth area suffered roof damage from fallen trees and winds there were estimated at 60 to 80 mph.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed		Estimated Damage Property Crops	July 1999 Character of Storm
OHIO, North								
Medina County Lodi	09	1715EST	0	20	0	0	100K	Tornado (F0)
	dozen		wned. An an	nateur radio t	ower was ki	nocked and		ling were torn off of several homes wi of a local business was peeled off. Man
Summit County								
Countywide	09	1735EST 1805EST			0	0	700K	Thunderstorm Wind
	Akron from : were l The N mph.	n was torn off and falling trees. Arc blown down in the NOAA Weather F	several cars volund a dozen ge county. A Stadio transmit	vere damaged grave stones tate of Emerg ter located of	d by falling were blown gency was d	trees. App over at an eclared in side of Ak	oroximately two do Akron cemetary. Akron because of v ron was knocked of	ees in Barberton. The roof of a house zen houses in the county received damage. A total of 400 trees and 225 power polwidespread damage and electrical outage off the air by winds estimated at 60 to 7 l construction site in Barberton was blow
Wayne County Countywide								Thunderstorm Wind Wooster. A tree fell onto the roof of so southeast of Wooster was significant
	damag		f trusses were	blown off a	roof and d			damaged in Wooster by falling trees an
Cuyahoga County	00	100077577			0	•		
Cleveland							ing Jr. Boulevard rated by the fire depart	Flash Flood near St Clair Street. The two occupants or occupants or occupants.
Stark County								
Countywide	its roo measu	of blew off tearing ared at Waco. A	g a hole in th tree fell on a	e roof. This a mobile hon	allowed wa	iter to dan	nage many of the i	Thunderstorm Wind ship was damaged when a fan housing of tems stored inside. A 60 mph gust was 44 and 619 in the northeast corner of the local hospital for treatment.
Mahoning County	00	19 5 0ECT			0	1	75K	There de note one Wind
Countywide	09	1850EST 1920EST			0	1	/ SIX	Thunderstorm Wind

Trees and power poles downed throughout the county. Around a dozen trees were downed in Struthers with one landing on a house causing minor damage. Another fallen tree did structural damage to a house in Austintown. A second house in Austintown lost most of its roof. A large tree fell on a car on the south side of Youngstown injuring the driver and destroying the car. The female occupant of the car was transported to a local hospital and treated for minor injuries.





July 1999 Time Local Path Length Path Width Number of Estimated Persons Damage OHIO, North **Portage County** 09 1853EST 0 0 20K Countywide Thunderstorm Wind (G58) A 67 mph gust was measured in Ravenna and several trees were downed. A large outdoor tent was blown down in Kent and the steeple of an historic church in Rootstown was severely damaged. **Holmes County** 0 10K Countywide 09 **Thunderstorm Wind** Many trees downed across the county. **Trumbull County** Countywide 09 50K Thunderstorm Wind (G51) Many trees downed in county. A 60 mph gust was measured at Leavittsburg. A tree fell on a house in the western portion of the county and destroyed a newly constructed porch. A 1600 pound tarp laying on a baseball field in Niles was picked up by winds estimated at 60 to 70 mph and thrown several hundred feet into a nearby grandstand. **Wood County** 0 15K Countywide 17 **Thunderstorm Wind** Trees and power lines downed. **Wood County** Countywide 17 1559EST 1706EST 0 15K Thunderstorm Wind Severe thunderstorms producing estimated winds of 70 to 80 mph knocked down trees and power lines throughout the county **Ottawa County** 1605EST 17 0 1K Elmore 0 Thunderstorm Wind One tree and one large limb blown down. **Lucas County** West Toledo **17** Flood Thunderstorms dumped one to two inches of rain over the area in less than an hour. Street flooding was reported throughout West Toledo with the intersection of Monroe and Douglas Streets under as much as two feet of water at times. Water above curb height was also reported along Secor and Central Avenues. **Lorain County** Countywide 0 5K Thunderstorm Wind Many large limbs downed in Avon with several trees downed in Elyria. The roof of a home in Elyria was slightly damaged by a falling tree. **Morrow County** Mt Gilead 21 1555EST 0 5K Thunderstorm Wind Many trees downed north of Mt. Gilead in the Canaan Lake Area. **Hancock County** 21 O **Benton Ridge** 1826EST 0 Hail (1.75) **Hancock County** Jenera 21 1830EST 0 Hail (0.75) **Lucas County** 21 2010EST 0 Oregon Hail (0.75) Sandusky County **Fremont** Thunderstorm Wind

A few large trees and power lines were knocked down on the east side of Fremont.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed		Estim Dan Property		July 1999 Character of Storm
OHIO, North									
Ottawa County Countywide	Grayto	own near the ir	ntersection of Gr	aytown Road	and State	Route 579	. An amat	teur radio t	Thunderstorm Wind er a half mile area two miles north of ower was knocked down in Graytown wnship were flattened.
Crawford County Bucyrus	23	1704EST			0	0		10K	Hail (0.88)
Crawford County Countywide	23 Many	1715EST trees downed a	across the northe	rn half of the	0 county.	0	10K		Thunderstorm Wind
Richland County Lexington	23	1743EST 1751EST			0	0		10K	Hail (1.00)
Wood County Countywide			limbs down throof Huffman and			0 0 by 30 fo	25K oot section o	of roofing v	Thunderstorm Wind was blown off a barn east of Jerry City
Lucas County Neapolis	23 Many	1930EST large trees dov	vned in the south	west corner	0 of the count	0 y near Nea	10K apolis and a	lso to the n	Thunderstorm Wind orth of Grand Rapids.
Medina County Medina	24 Severa	1945EST al trees downed	l in Medina.		0	0	5K		Thunderstorm Wind
Cuyahoga County Bay Vlg	picnic produc	table they we	re sitting at. A	lthough no a moved throu	dverse wear gh the area	ther was o about an	occurring at	the time	Thunderstorm Wind of a tree and fell 60 feet landing on the of the accident, strong thunderstorms ieved that these storms weakened the
Lorain County Rochester	24 Large	2000EST trees downed.			0	0	5K		Thunderstorm Wind
Ashland County Countywide	24 Many	2015EST 2025EST large trees dow	vned in Ashland	and Nankin	0	0	10K		Thunderstorm Wind
Medina County Countywide	24 Large	2015EST 2030EST trees and limbs	s downed in Lod	i, Hinckley a	0 nd Guilford	0 Township	15K		Thunderstorm Wind
Ashland County Polk	24	2020EST			0	0		20K	Hail (1.00)
Crawford County Galion	24 A larg	2030EST ge tree fell on a	van in the city o	f Galion and	0 completely	0 destroyed	20K it.		Thunderstorm Wind





Time Path Path Number of Estimated Local/ Length Width Persons Damage
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

OHIO, North

Ashland County	
Countywide	

24 2100EST 0 0 100K 20K Thunderstorm Wind 2130EST

Thunderstorms producing strong downburst winds downed dozens of trees and limbs throughout the county. A 60 by 120 foot pole barn was blown down and totally destroyed east of Hayesville on County Road 30A. The poles supporting the front side of the building were pulled completely out of the ground while the poles in the back were snapped off at ground level. A home under construction on Township Road 251 south of Rowsburg also suffered damage.

Wayne County Countywide	24 Larges	2100EST s trees downed across the northern half of the	0 county.	0	10K		Thunderstorm Wind
Holmes County Countywide	24 Many	2110EST 2130EST trees and powerlines downed across the coun	Onty.	0	15K		Thunderstorm Wind
Wayne County Countywide	24 Large	2130EST limbs and power lines downed throughout th	0 e county.	0	15K		Thunderstorm Wind
Lucas County Countywide	24 Many	2350EST trees down in Providence Township in the so	0 outhwest co	0 orner of the	10K county.		Thunderstorm Wind
Lucas County Toledo	25 A 60 r	0000EST mph wind gust was measured.	0	0			Thunderstorm Wind (G52)
Hancock County Mc Comb	25 A 60 i	0020EST mph wind gust was measured and a few large	0 trees were	0 downed.	5K		Thunderstorm Wind (G52)
Wood County Bowling Green	25	0020EST	0	0		5K	Hail (1.00)
Geauga County Chardon	28	0745EST	0	0		10K	Hail (1.50)
Trumbull County Mesopotamia	28 Many	0807EST trees and large limbs downed.	0	0	5K		Thunderstorm Wind
Geauga County Chardon	28	0810EST	0	0		10K	Hail (1.75)
Trumbull County Mesopotamia	28	0825EST	0	0		10K	Hail (0.75)
Trumbull County Countywide	28	0837EST 0904EST	0	0	10K		Thunderstorm Wind
	Trees	downed across the northern half of the county	y. Two 14	foot boats	were dama	ged by fal	llen trees at Mosquito Lake State Park.

Ashland County
Countywide 28 0915EST 0 0 125K Thunderstorm Wind

A TV tower was toppled near Nova and an equipment building was blown down and destroyed five miles northeast of Loudonville on County Road 2575. A small barn near the equipment building was also heavily damaged





July 1999 Path Length (Miles) Time Local Path Width Number of Estimated Persons Damage OHIO, North **Trumbull County** Countywide 0 0 75K 28 Thunderstorm Wind Trees downed across the southern half of the county. A 65 mph gust was measured in Warren. A mobile home in Masury was cut in half by a fallen tree and destroyed. Eight trees were downed in Brookfield with one fallen tree doing serious damage to a car. Other trees were downed in Warren, Niles and Liberty Township. **Trumbull County** Countywide 28 0930EST 1030EST 50K Flood One to two inches of rainfall fell in less than an hour resulting in widespread street flooding in Warren and Niles. Most of the flooding was due to backed up sewer systems and several roads had to be closed. The roof of a municipal building in Warren partially collapsed from the weight of the water on top of it. **Trumbull County** Warren 28 0940EST 0 Hail (0.88) **Lorain County** Elyria 28 0945EST 0 0 Thunderstorm Wind (G52) A 60 mph wind gust was measured in Elyria. **Mahoning County** 0950EST **Boardman** 28 0 5K Thunderstorm Wind Several large limbs were blown down **Mahoning County** 28 Youngstown 0950EST 0 0 Hail (2.00) **Lorain County** 28 1005EST 0 225K Elyria 0 Lightning A church was struck by lightning and caught fire. **Knox County** 1015EST 1050EST Countywide 28 15K **Thunderstorm Wind** Trees and large limbs downed throughout the county. Siding was torn off a house in Mount Vernon **Morrow County** 1015EST 1030EST O 0 10K Marengo 28 Thunderstorm Wind Many trees and limbs downed. **Lorain County** 1025EST Grafton 28 5K Thunderstorm Wind Trees downed. **Medina County** Medina 28 1025EST 5K Hail (0.75) **Ashland County** 28 1030EST Polk $\mathbf{0}$ Hail (0.75) **Medina County Central Portion** 28 1030EST 0 20K Thunderstorm Wind Trees downed in and around the City of Medina. The roofs of three houses received minor damage from fallen trees. **Holmes County** Nashville to 28 5 50 75K 1108EST Tornado (F1) 1118EST

A tornado touched down just north of Nashville near a campground and then traveled east along County Roads 316 and 329 to near





July 1999 Time Local/ Path Length Path Number of Estimated Persons Width Damage OHIO, North Holmesville. From the initial touchdown eastward, the damage path was intermittent. Four females, ages 12, 14, 17 and 50 were injured by flying debris while standing inside of an 80 by 100 foot pavilion at the campground. All four victims were transported to a local hospital and the 17 year old required surgery for arm injuries. The roof of the pavilion was partially torn off and a nearby small building was moved approximately 10 feet. A video game inside the small building was flipped over. Six inch by six inch wood posts supporting the pavilion were lifted out of the ground two feet and several trees were also blown down at the campground. Around a dozen trees were snapped just to the west of Holmesville and the roofs of two house suffered damage from fallen trees. **Wavne County** Countywide 28 25K Thunderstorm Wind Trees were downed in and around Shreve and a barn was blown down and destroyed near Burbank **Holmes County** 1130EST **Berlin** 28 0 0 10K Thunderstorm Wind Many trees reported down with minor damage done to the roof of a strip mall **Stark County** Waynesburg 28 1150EST 0 Thunderstorm Wind (G52) A 60 mph wind gust was measured in Waynesburg. **Lake County** Fairport Harbor 28 2219EST Thunderstorm Wind (G58) A 67 mph wind gust was measured at the Fairport Harbor Lighthouse. Lake County Painesville 28 Thunderstorm Wind (G52) Many large trees downed in Painesville. One tree pierced the roof of a nursing home with branches ending up less than a foot away from an elderly woman laying in bed. Three classic cars were severely damaged when the garage they were in was destroyed by a fallen tree. A brand new sport utility vehicle was also destroyed by a fallen tree. An additional dozen trees were downed to the east of Painesville in North Perry. **Ashtabula County** Countywide 75K 28 Thunderstorm Wind 2250EST Dozens of trees and power lines downed across the county. Around a dozen trees were blown down in Ashtabula with eight trees were downed in Jefferson. A cemetery in Jefferson had several grave stones e damaged by fallen trees. A fallen tree did significant structural damage to a house in Geneva on the Lake with another tree downed on a house in Saybrook **Cuyahoga County Bedford** 28 2245EST Hail (0.75) **Geauga County Central Portion** 15K 28 Thunderstorm Wind Many trees and power lines downed throughout the central portion of the county **Cuyahoga County Cleveland Lakefront** 25K Thunderstorm Wind Many trees were blown down in Cleveland, Euclid and Bedford Heights. A fallen tree poked a hole in the roof of a home in Bedford Heights and another tree did damage to a garage. Fallen limbs did minor damage to several cars **Cuyahoga County Cleveland Lakefront** 28 2253EST Thunderstorm Wind (G56) A 64 mph wind gust was measured at Burke Lakefront Airport. **Cuyahoga County** Valley View 28 200 175K Tornado (F1)

The tornado touched down near Schrieber Road then travelled south into Summit County. The damage path was around four miles



Huron County

30

2336EST

Wakeman

National Weather Service Storm Data and Unusual Weather Phenomena



July 1999 Time Local/ Path Length Path Width Number of Estimated Damage Persons OHIO, North in length and was non-continuous. Approximately 200 trees were downed along the damage path. A house in Valley View had several windows blown out and also suffered roof and chimney damage. The roof of the house was penetrated in couple of spots by flying debris. A small building nearby was blown off of its foundation and a car was also significantly damaged in the area. Several other homes and a barn sustained roof damage from fallen trees and one house had all of its window screens blown out. A semi trailer was flipped on its side near Hub Park. **Summit County** 2304EST 2308EST 100 75K Sagamore Hills 28 The Cuyahoga County tornado weakened as it crossed the county line near Sagamore Hills. The tornado traveled approximately two miles in Summit County before dissipating as it approached Highway 82 from the north. The damage path was non-continuous. Several dozen trees were downed and a couple houses received minor roof damage. Fallen trees also damaged three cars **Summit County** Northfield to Twinsburg 28 40K Thunderstorm Wind 2320EST Many trees downed across the northern portion of the county. A large tree in downtown Twinsburg landed on a set of bleachers and destroyed them. Two trees fell on homes in Macedonia and two trucks in Macedonia was also severely damaged by fallen trees. Five trees were downed in Northfield. **Lorain County** 28 2310EST 5K Avon Lake **Thunderstorm Wind** Trees and power lines downed. **Summit County** 28 2310EST **Twinsburg** 0 Hail (0.75) **Portage County** 28 2315EST 5K Aurora 0 Hail (0.75) **Geauga County** 2318EST 100K Huntsburg 28 Lightning Lightning struck a barn two miles north of Huntsburg. The resulting fire destroyed the barn and several cattle and approximately 50 pigs perished. **Trumbull County** 2325EST Cortland 28 0 5K Thunderstorm Wind Many trees downed. **Ottawa County** 2330EST **Port Clinton** 28 5K Thunderstorm Wind Many trees and large limbs downed. **Portage County** Ravenna 28 2330EST 30K Thunderstorm Wind Many trees downed including one that fell on a car. The chimney of a house was partially blown down. **Mahoning County** 28 2344EST 5K Youngstown 0 Thunderstorm Wind Trees and power lines downed. **Lucas County** Whitehouse 29 2159EST 0 Hail (0.75) **Huron County** Norwalk 30 2250EST 0 Hail (0.75)

0

0

10K

Hail (0.75)





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numbe Perso Killed		Estimated Damage Property Crop	S Character of Storm	July 1999
OHIO, North									
Huron County Wakeman	30 Trees o	2337EST downed.			0	0	5K	Thunderstorm Wi	nd
Erie County Berlin Hgts	30 One tro	2354EST ee and several larg	ge limbs dowi	ned.	0	0	5K	Thunderstorm Wi	nd
Ashland County Rowsburg	30 Trees o	2355EST downed.			0	0	5K	Thunderstorm Wi	nd
Wayne County Springville	31 Numer	0015EST rous trees and pow	ver lines dowi	ned in and ar	0 ound Springs	0 ville.	5K	Thunderstorm Wi	nd
Lorain County Lorain	31	0114EST			0	0		Hail (0.75)	
Medina County Lodi	31 Trees o	0315EST downed.			0	0	5K	Thunderstorm Wi	nd
Geauga County Middlefield	31	1550EST			0	0	101	K Hail (1.25)	
Lake County Countywide								Thunderstorm Windownty. Four homes suffered and in Concord by falling tree	minor damage
Sandusky County Gibsonburg		1639EST al large trees were		in and arou	0 nd Gibsonbu	0 rg and a	25K barn south of tow	Thunderstorm Winnear the intersection of S	
Geauga County Countywide	31	1640EST			1	0	400K	Thunderstorm Wi	nd
	Punder park w Dozen power	rson State Park in were severely dam s of trees were do	Newbury To aged. A tree owned in Bair owned in Bur	ownship whe e fell on a h nbridge when ton Village a	n a 40 foot to louse in New re one house	ree fell o bury To received	on her camper and wnship and destro d extensive damag	60 mph. A 55 year old femal crushed it. Twelve other oyed the living, family and ge from a fallen tree. Doze and destroyed in Chardon and	campers in the dining rooms.
Ashtabula County Countywide	and the	e Orwell Fire De	partment was lefferson. A	damaged w large tent wa	hen fallen tr as blown dov	ees poke vn and tl	ed three 15 inch h	Thunderstorm Wing. The library in Orwell lost coles into its roof. Many an outdoor party north of the coles in the coles i	some its siding trees were also
Portage County Countywide	31 Trees	1720EST downed across the	e county. A	mobile home	0 e in Garretsv	0 ille was	75K ripped off of its for	Thunderstorm Wi oundation and blown 45 fe	





Thunderstorm Wind (G70)

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		ber of sons Injured	Estin Dar Property	nated nage Crops	Character of Storm	July 1999
OHIO, North										
	were b	olown down on a g	golf course jus	st north of K	ent.					

Stark County Hartville

31 1720EST 0 0
An 81 mph wind gust was measured and trees were downed in Hartville.

Erie County Countywide

31 1725EST 0 0 300K Thunderstorm Wind

Trees and power poles downed across the county. A house under construction to the north of Castalia on State Route 269 was damaged when part of its framing was blown down. A nearby barn also lost its roof. A semi truck crossing a bridge over Lake Erie on State Route 2 between Port Clinton and Sandusky was blown over. Thirty poles along a causeway leading to an amusement park were also knocked over. In Sandusky, approximately 30 percent of the streets in the city had to be closed because of fallen trees. One home in Sandusky was severely damaged when a porch on its top floor was destroyed by a fallen tree. Several other homes and at least ten cars were damaged by fallen trees and limbs in Sandusky. At least 20 trees were downed in and around Vermilior.

10K

Trumbull County Countywide

31 1725EST 0 0 250K Thunderstorm Wind

Hundreds of trees downed across the county by thunderstorm winds of 60 to 80 mph. A 70 mph gust was measured at Leavittsburg with a 60 mph gust in Mecca. A large tree fell on a van in Champion trapping a mother and her young daughter inside. Both were uninjured. A tree fell on a house on the northwest side of Warren and did major structural damage. At least four other homes were damaged in Warren. One of the homes had some siding blown off, another had its chimney and a fence blown down and a third had a porch destroyed by a fallen tree. Twenty five trees were downed in Howland Township and between 200 and 250 trees were downed at a golf course on the east side of Warren. Additional trees were downed in Hubbard, Southington and Niles

Crawford County						
Bucyrus	31	1810EST	0	0	5K	Thunderstorm Wind
•	Trees	and power lines downed.				
Mahoning County						
Struthers	31	1825EST	0	0	10K	Thunderstorm Wind
	Many	trees downed.				
Richland County						
Shelby	31	1910EST	0	0	10K	Thunderstorm Wind
•	A barr	n just south of Shelby suffered damage to	its roof.			
Stark County						
Canal Fulton	31	1923EST	0	0	5K	Thunderstorm Wind
	Trees	downed.				
Marion County						
Countywide	31	1925EST	0	0	10K	Th 14 1175 1
Countywide	31	1925EST 1945EST	U	U	IUK	Thunderstorm Wind
	Many	trees downed across the county.				
Erie County						
Crystal Rock	31	1948EST	0	0	25K	Thunderstorm Wind
•	Many	trees and power poles downed. A hous	e south of Crys	tal Rock	near the interse	ection of State Route 269 and US 6 suffered

structural damage from a fallen tree. A nearby barn lost its roof.





		Time Local/	Path Length	Path Width	Numb Pers		Estimated Damage	July 1999		
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property Crops	Character of Storm		
OHIO, North										
Wayne County										
Countywide	31 Many	1955EST 2015EST trees and power	lines downed.		0	0	5K	Thunderstorm Wind		
Cuyahoga County	·	•								
Cle Hopkins Intl Arp	blown	down with at le	ast three landi	ng on house	es. Other d	amage in	Olmstead Falls incl	Thunderstorm Wind (G59) Imstead Falls, around a dozen trees were uded a broken railroad crossing gate, a ath of the airport in Berea		
Cuyahoga County Countywide	31	1600EST 1620EST			0	0	200K	Thunderstorm Wind		
	the m	y. Cars and boats arina had window as not injured. S	were damaged vs blown out everal small bo	l at a marina A 200 pound oats were da	on East 55t d man walki maged inclu	h Street in ng near th Iding one	n Cleveland. Approx ne parking lot was that that was lifted out o	ved inland over the eastern half of the imately 50 cars sitting in a parking lot at rown 30 feet and ended up in the water. f the water and blown over a chain link s, Chagrin Falls and Moreland Hills.		
Sandusky County Gibsonburg	31	1620EST			0	0	10K	Hail (0.75)		
Lorain County Lorain	31	1722EST			0	0		Thunderstorm Wind (G52)		
Trumbull County Leavittsburg	31 A 70	1725EST mph wind gust wa	as measured in	Leavittsburg	0 g with a 60 1	0 mph gust	10K measured in Mecca.	Thunderstorm Wind (G61) Four trees were downed in Mecca.		
Hancock County										
Findlay	31	1750EST			0	0	15K	Hail (1.75)		
Stark County Canton	31	1921EST			0	0	5K	Hail (0.88)		
PENNSYLVANIA, No	orthwes	<u>t</u>								
PAZ001>003		ern Erie - South	ern Erie - Cra	wford	•					
	01 31	0000EST 2359EST			0	0		Excessive Heat		
	record	l high of 98 degr	rees on the 31s	t. This tem	peratures w	as only 2		the all time record high in Erie of 100 est July on record.		
PAZ001>003	North 01 31	ern Erie - South 0000EST 2359EST	ern Erie - Cra	wford	0	0		Drought		
			oss northwest	Pennsylvani	a eased as t	hundersto	orm rain became mor	re widespread. None the less, very dry		

Drought conditions across northwest Pennsylvania eased as thunderstorm rain became more widespread. None the less, very dry soil conditions persisted in a few areas that missed the brunt of the thunderstorm activity. Crop yields will likely be reduced because of the lack of adequate rainfall. Losses due to the drought were unknown.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed		Estima Dama Property	ted ige Crops	July 1999 Character of Storm
PENNSYLVANIA, N	orthwest								
Crawford County Springboro	03	1442EST			0	0		5K	Hail (0.75)
Crawford County Springboro	03	1458EST			0	0		10K	Hail (1.00)
Erie County Erie Intl Arpt	03	1615EST			0	0			Hail (0.75)
Erie County Erie Intl Arpt	03 A 61 r	1617EST nph wind gust wa	as measured a	ıt Erie Interna	0 tional Airpo	ort.			Thunderstorm Wind (G53)
Erie County Erie	03	1620EST			0	0		5K	Hail (0.75)
Crawford County Countywide	06	1540EST 1610EST	ı. ı ı	. 4 . 76 . 1	0	0	25K		Thunderstorm Wind
Erie County Countywide	09 Estima	1700EST 1800EST atted winds of 60 ford seriously da) to 70 mph 1	knocked dow	0 n trees and	0 power lin	120K nes throughou		Thunderstorm Wind unty. A large tree fell on a house in Cranesville.
Crawford County Countywide	09 1705EST 1800EST A damaging line of severe thunderstorms packing estimated winds of 60 to 85 mph moved across the county knocking down many as 1000 trees. The majority of the damage occurred along a path from near Linesville to Harmonsburg to Meadvil Approximately one half of the county lost power. A total of 41 homes were damaged in Harmonsburg with 18 homes damaged Linesville and an additional 3 homes damaged in Pinesville Township. The roof of a factory in Linesville was also blown of Many cars were damaged by fallen trees.								
Crawford County Meadville	17 A 61 r	1756EST nph wind gust wa	as measured i	n Meadville.	0 Large limbs	0 s were dov	5K wned near Lir	nesville a	Thunderstorm Wind (G53) nd Saegertown
Crawford County Countywide		2335EST 2350EST trees downed ac aut Lake was dar			0 the county.	0 Three p	35K ower poles w	vere snap	Thunderstorm Wind ped east of Linesville and a house in
Erie County Countywide	dozen							_	Thunderstorm Wind were especially hard hit with several homes nearby sustained minor damage
Erie County Erie Intl Arpt	31 A 61 r	1639EST nph wind gust wa	as measured a	ıt Erie Interna	0 tional Airpo	ort.			Thunderstorm Wind (G53)
Crawford County Saegertown	31	1748EST trees downed.			0	0	10K		Thunderstorm Wind